

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims.

1-84. (canceled)

85. (previously presented) A monoclonal antibody that specifically binds to amino acids 33-52 or 33-53 of human STOP-1.

86. (previously presented) The monoclonal antibody according to claim 85, wherein the antibody blocks STOP-1 binding to cells.

87.-88. (canceled)

89. (currently amended) The monoclonal antibody according to claim 85 ~~or 87~~, wherein the monoclonal antibody binds to an oligomeric form of human STOP-1.

90.-93. (canceled)

94. (currently amended) A monoclonal antibody that specifically binds to human STOP-1 and that is selected from the group consisting of:

(i) a monoclonal antibody comprising (a) a V_H-CDR1 comprising the amino acid sequence of TINNYD (SEQ ID NO:14); (b) a V_H-CDR2 comprising the amino acid sequence of GYISPPSGATY (SEQ ID NO:15); and (c) a V_H-CDR3 comprising the amino acid sequence CARMVGMRRGVMDY (SEQ ID NO:16); and

(ii) a monoclonal antibody produced by the hybridoma cell line deposited with ATCC under accession number 6B12.1.7.

95.-96. (canceled)

97. (currently amended) A monoclonal antibody that specifically binds to human STOP-1 and that comprises comprising the amino acid sequence of the heavy chain of FIG.31 (amino acids 21-251 of SEQ ID NO:105).

98. (currently amended) The monoclonal antibody according to claim 96-~~er~~ 97, further comprising the amino acid sequence of:

- (a) the light chain of FIG.27 (amino acids 24-239 of SEQ ID NO:92); or
- (b) the light chain of FIG.33 (amino acids 20-233 of SEQ ID NO:110).

99. (canceled)

100. (previously presented) A monoclonal antibody having a biological characteristic of 6B12 produced by the hybridoma cell line deposited on March 28, 2003 as designation 6B12.1.7 in the American Type Culture Collection (ATCC), wherein the biological characteristic is the ability to block STOP-1 binding to cells.

101. (canceled)

102. (previously presented) A monoclonal antibody that specifically binds to STOP-1, wherein the binding of the antibody to STOP-1 can be inhibited by a second monoclonal antibody selected from the group consisting of F5 encoded by the nucleic acid molecule deposited with ATCC as designation V0350-4-F5 and 6B12 produced by the hybridoma cell line deposited with the ATCC as designation 6B12.1.7.

103. (canceled)

104. (previously presented) A monoclonal antibody that specifically binds to STOP-1, wherein the antibody comprises the light and heavy chain sequences of an antibody selected from the group consisting of F5 encoded by the nucleic acid molecule deposited with ATCC as designation V0350-4-F5, and 6B12 produced by the hybridoma cell line deposited with the ATCC as designation 6B12.1.7.

105. (currently amended) The antibody according to any one of claims 85-86, 89, 94, 97-98, 100, 102, and 104~~88, 90-97 and 99-104~~, wherein the antibody is a chimeric antibody, humanized antibody, antibody fragment, or bispecific antibody.

106. (currently amended) The antibody according to any one of claims 85-86, 89, 94, 97-98, 100, 102, and 104~~88, 90-97 and 99-104~~, wherein the antibody is conjugated to an agent selected from the group consisting of a growth inhibitory agent, a cytotoxic agent, a detection agent, an agent that improves the bioavailability of the antibody, and an agent that improves the half-life of the antibody.

107. (previously presented) The antibody according to claim 106, wherein said cytotoxic agent is selected from the group consisting of a toxin, an antibiotic and a radioactive isotope.

108. (currently amended) A composition comprising the monoclonal antibody according to any one of claims 85-86, 89, 94, 97-98, 100, 102, and 104~~88, 90-97 and 99-104~~.

109. (previously presented) The composition according to claim 108, further comprising a stromal targeting agent.

110. (previously presented) The composition according to claim 109, wherein the stromal targeting agent is covalently linked to the monoclonal antibody.

111. (previously presented) The composition according to claim 109, wherein the stromal targeting agent recognizes a stromal cell of a tumor.

112. (new) A monoclonal antibody comprising (a) a V_H comprising the CDR1, CDR2, and CDR3 of the V_H of the monoclonal antibody produced by the hybridoma cell line deposited with ATCC under accession number 6B12.1.7 and (b) a V_L comprising the CDR1, CDR2, and CDR3 of the V_L of the monoclonal antibody produced by the hybridoma cell line deposited with ATCC under accession number 6B12.1.7.

113. (new) The monoclonal antibody of claim 94, wherein the monoclonal antibody is produced by the hybridoma cell line deposited with ATCC under accession number 6B12.1.7.

114. (new) A humanized form of the monoclonal antibody of claim 113.